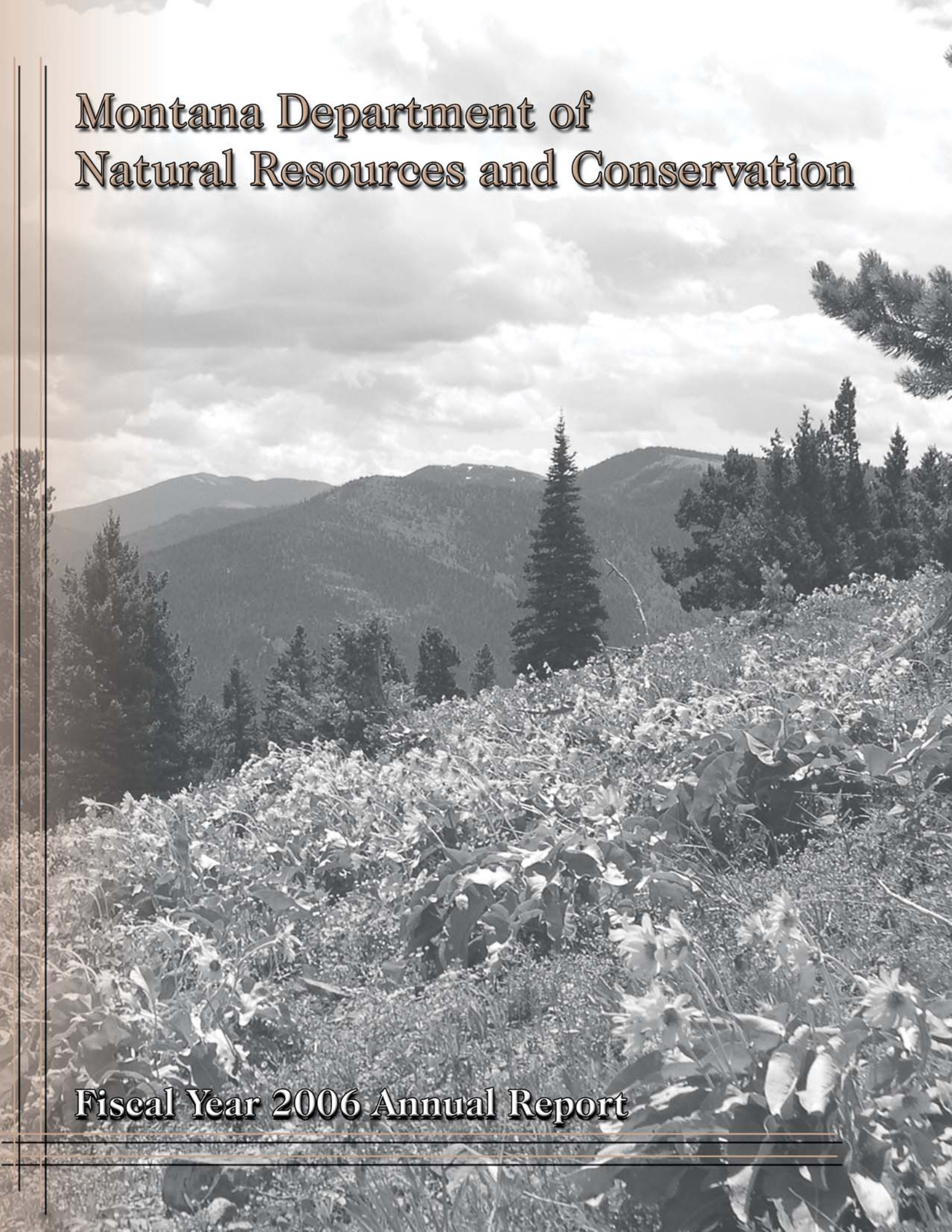
Montana Department of Natural Resources and Conservation



Fiscal Year 2006 Annual Report

Conservation and Resource Development Division

Conservation and Resource Development Division

Provide technical and financial assistance to local governments, state agencies, and private citizens for the conservation, development, protection, and management of the state's natural resources.

The Conservation and Resource Development Division (CARDD) helps manage natural resources and finance conservation, resource management, and reclamation activities. The division has 27 employees who administer the work of the Conservation Districts Bureau, the Financial Development Bureau, and the Resource Development Bureau.

For more information, please visit our website at www.dnrc.mt.gov/cardd/

At the annual Montana Youth Range Camp, attendees learn rangeland management. Photo by Ross Campbell

Conservation Districts Bureau

Under state law, the Conservation Districts Bureau (CDB) is responsible for assisting Montana's conservation districts and state grazing districts. A conservation district (CD) is a legal subdivision of state government that: (1) develops and carries out long-range programs that conserve and improve soil and water resources within its boundaries, and (2) encourages maximum participation by the general public and all local public and private agencies to fulfill this purpose.

CDB works with the people of Montana on these eight areas of conservation and resource management:

- conservation district supervision and assistance;
- watershed efforts and projects;
- rangeland management coordination;
- stream protection;
- natural resource conservation education activities;
- grant and loan programs;
- resource conservation and development; and
- salinity control.

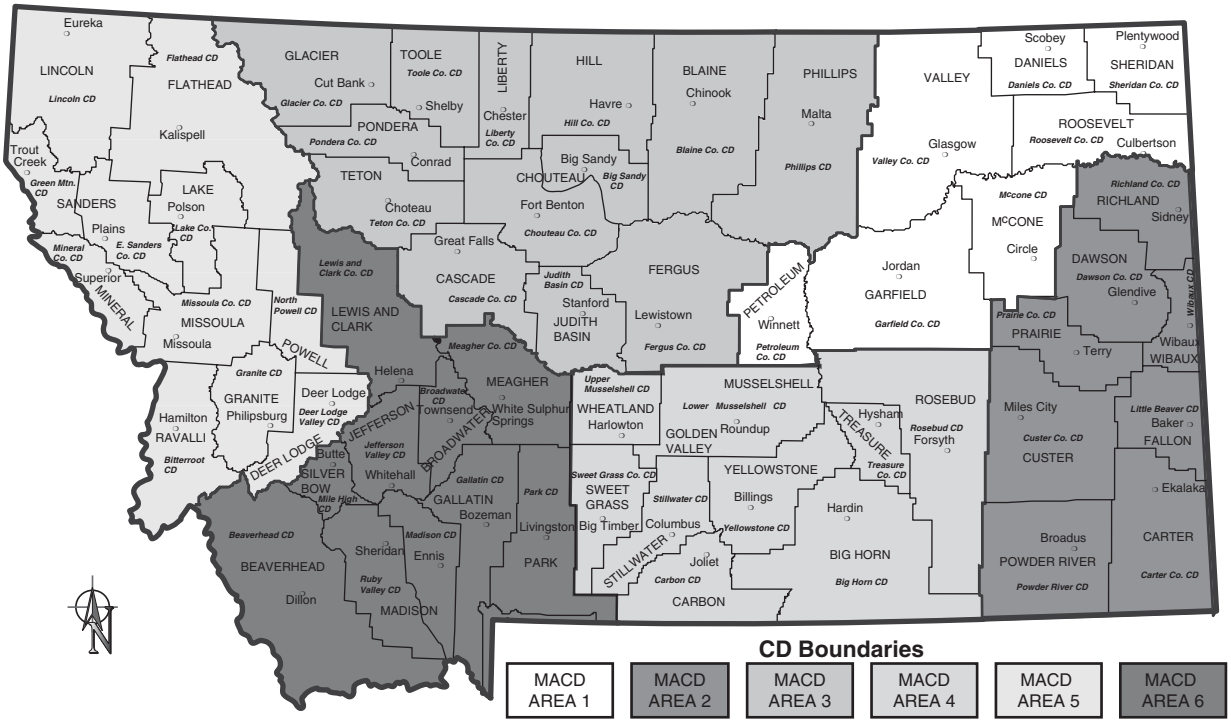
Conservation District Supervision and Assistance

By law, the CDB is required to provide organizational, technical, legal, and financial assistance to Montana's 58 conservation districts (see Figure 3). This assistance is provided to CDs through a variety of programs developed to assist CDs in meeting mandated duties. CDs are political subdivisions of state government that address soil and water conservation and administer the Natural Streambed and Land Preservation Act. The CDB contracts for legal and technical services for conservation district administration of the act. Grants were provided to CDs for legal services for project review and procedural advice, contract review, water reservation assistance, and work associated with Dry Prairie Rural Water Authority, on which CD members serve. In Fiscal Year (FY) 2006, CDB helped organize and participated in new CD employee orientation sessions, and supervisor workshops focusing on watershed planning and financial responsibility; conducted real estate workshops; and participated in stream permitting workshops for contractors, CD supervisors, and landowners.

The Resource Conservation Advisory Council, which consists of seven members serving at the pleasure of the Governor, meets four times a year, provides advice and assistance on conservation matters, and sets guidelines for CDB grant programs. Current members are:

Member	Town	Representing
Bob Breipohl	Saco	North Central Montana
Robert Anderson	Poplar	General Public
Robert Fossum	Richland	Eastern Montana
Marieanne Hanser	Billings	South Central Montana
Dave Schwarz	Terry	Conservation Districts
Mike Wendland	Rudyard	Conservation Districts
Vicki McGuire	Eureka	Western Montana

Figure 3
Montana's Conservation Districts



The Conservation Districts Bureau also works with the Montana Association of Conservation Districts (MACD) and the National Association of Conservation Districts (NACD) to address natural resource concerns on the state and national level.

Watershed Efforts and Projects

Through the capacity-building program, conservation districts have identified the need for watershed planning as a high-priority goal. Conservation districts, as the local entity responsible for addressing non-point source water pollution, play a key role in developing local watershed plans. CDB provides technical and financial assistance to conservation districts in support of watershed efforts. In addition, CDB participates on the Watershed Coordinating Council, a group of state and federal agencies and private organizations that coordinates programs in Montana that address aspects of watershed management.

Watershed Planning and Assistance Grant Program

The purpose of the Watershed Planning and Assistance Grant (WPAG) Program is to assist conservation districts and affiliated local watershed groups with expenses associated with watershed planning. Funds can be used for collection of baseline resource information, facilitators, development of a watershed management plan, training, educational efforts, or incidental costs associated with watershed planning.

In FY 2006, grants totaling $99,425 were awarded to 11 districts. Four resource assessment grants, six coordination grants, and one education grant were funded. The resource areas included weeds, water quantity, and water quality. The size of these projects ranged from small watersheds to large basins. The projects funded are listed in Table 2.

Stream Assessments

During FY 2006, CDs throughout Montana conducted several comprehensive stream corridor assessments in collaboration with the Natural Resources Conservation Service (NRCS) and Department of Natural Resources and Conservation (DNRC). Assessments included:

- Brown's Gulch - Mile High CD
- Boulder River - Sweet Grass County CD
- Marias River - Pondera, Toole, Liberty, and Glacier counties CDs
- Mill Creek - Flathead CD
- Smith River - Meagher and Cascade counties CDs

Table 2
Watershed Planning and Assistance Grants Awarded in FY 2006

Conservation District	Project Name	Grant Amount
Beaverhead	Beaverhead Watershed Group	$ 10,000
Beaverhead	Big Hole Watershed Group & Planning	9,000
Bitterroot	Bitterroot Watershed Activities	4,000
Chouteau	Teton River Watershed Project Update	3,000
Glacier	Marias River Watershed Coordination	10,000
Granite	Upper Clark Fork Steering Committee	10,000
Lower Musselshell	Lower Musselshell Watershed Coordination	7,475
Missoula	Lolo Creek Watershed Activities	5,500
North Powell	Blackfoot Challenge Watershed Planning	5,000
Park	Upper Yellowstone Watershed Activities	10,000
Petroleum	Musselshell/Mosby Watershed Activities	5,450
Rosebud	Tongue River Watershed Group	10,000
Rosebud	Rosebud Watershed Group Activities	10,000
		Total $ 99,425

The purpose behind these stream assessments is to provide baseline resource information to conservation districts, watershed groups, landowners, and agencies to further their understanding about stream conditions and function in their areas. Most assessments eventually lead to voluntary restoration projects that utilize DNRC grant funds and/or NRCS conservation programs.

Rolling Rivers Trailers

CDB collaborates with MACD in the Rolling Rivers Trailer Program by providing technical support. The Rolling River is a five-by-ten-foot utility trailer with a six-inch-deep bed that is filled with "sand" (actually, recycled plastic granules). A meandering river or two is scooped out, running from one end to the other. Small figures of buildings, animals, and machinery are placed on top. When water is turned on at the top of the watershed, it flows through the river and demonstrates a variety of water-related lessons, including stream health and good stewardship.

Four trailers operate in the state: (1) a demonstration trailer coordinated by CDB out of Helena, (2) a trailer in northwestern Montana sponsored by Flathead CD, (3) a trailer in eastern Montana coordinated by Richland County CD in Sidney, and (4) a trailer based out of Cascade County CD in Great Falls.

Since 2003, the four Rolling Rivers trailers have made 102 presentations to more than 21,500 people. Audiences included both adults and children. During FY 2006, CDB made 19 additional presentations to 2,227 people. Development of training workshops and promotional/educational materials continues, which increases effectiveness of the trailers. A Rolling Rivers Trailer is displayed at the Northern International Livestock Expedition (NILE) in Billings every fall; fourth and fifth graders from the area attend.

Students gather around the Rolling Rivers Trailer to learn about watershed management. Photo courtesy of Lower Musselshell CD

Rangeland Resource Coordination

The Rangeland Resource Program has four major areas of emphasis:

- working with county range committees, conservation districts, and producer groups to foster sound rangeland management;
- encouraging coordination and cooperation between private, state, and federal entities involved in range management;
- administering the Rangeland Improvement Loan Program; and
- co-sponsoring the Governor's Range Tour, Winter Grazing Seminar, and Montana Youth Range Camp.

The program receives guidance from the Rangeland Resource Executive Committee, which is composed of six ranchers located across the state and appointed by the Governor. Members include:

Chair Les Gilman, Alder;
Vice-Chair John Hollenback, Gold Creek;
Bob Anderson, Culbertson
Quinn Haughian, Terry
Steve Hedstrom, Raynesford; and
Michael Lane, Three Forks.

In addition, an ad hoc committee of agency and organization personnel serves in an advisory capacity to the executive committee.

CD staff work to strengthen local grazing management programs by helping sponsor workshops, tours, and demonstration projects. Examples of these activities include the Governor's Range Tour, Montana Youth Range Camp, and Winter Grazing Seminar. The 2005 Legislature and the executive branch approved the re-establishment of funds for a rangeland resource program specialist.

A loan program was started in 1979 for the purpose of improving rangelands in Montana. To date, 236 applications have been received for loans totaling $4,633,989; 44 loans totaling $515,779 are in repayment status. A typical rangeland loan project involves drilling a well and installing underground water lines to supply stock tanks. These stock tanks are usually in areas where water is insufficient or unsuitable for livestock. The projects are sometimes combined with cross fencing and an overall grazing plan to improve the rangeland. Over 1 million acres of Montana range land have been improved using funds from this program.

Kelly Spring and spring box

Kelly Spring underground pipe

Stock watering tank along pipeline
Photos by Steve Schmitz

Grazing District Supervision and Assistance

State law provides for the creation of cooperative, nonprofit grazing districts. The law also sets up a permitting system that aids in the management of grazing lands where ownership is intermingled, in order to conserve, protect, restore, and properly utilize grass, forage, and range resources. In its administration of the Montana Grass Conservation Act (grazing district law), the Montana Grass

Conservation Commission, administratively attached to DNRC, advises, supervises, and coordinates the formation and operation of these grazing districts. Uniform plans that conform to recognized conservation practices are developed for the use of lands within the boundaries of the districts. The 27 state grazing districts represent 1,353 permittees and cover 10,501,070 acres of land.

In FY 2006, the commission was composed of these five members:

Steve Barnard, Hinsdale;
Dewayne Ozark, Glasgow;
Leo Solf, Winnett;
Dan Teigen, Teigen; and
Alvin Windy Boy, Box Elder

Stream Protection

CDB provides assistance to conservation districts in administration of the Natural Streambed and Land Preservation Act, commonly referred to as the "310 law." Under it, CDs issue permits for projects on perennially flowing streams.

CDB also works to educate the public and conservation district supervisors in the "310" permitting process. In FY 2006, CDB participated in several realtor workshops, contractor workshops, and workshops for conservation district employees and supervisors. CDB reprinted *A Guide to Stream Permitting in Montana* and distributed almost 2,000 copies to state and federal agencies, as well as conservation districts. CDB hosts a website pertaining to stream permitting forms, with links and information about stream permitting agencies.

CDs processed 1,501 Natural Streambed and Land Preservation Act "310" permit applications in FY 2006 and CDB distributed $100,000 to 50 conservation districts to help offset the cost of processing those permits. CDB has contracts with technical service providers and attorneys that CDs can call on to provide technical or legal assistance when dealing with difficult or complex projects. In FY 2006, technical assistance providers reviewed projects. Legal assistance for "310" issues was provided to the following CDs: Green Mountain, Broadwater, Lewis and Clark, Gallatin, Stillwater, and Pondera.

Yellowstone River Conservation District Council

CDB distributed $60,050 to the Custer County Conservation District to support the Yellowstone River Conservation District Council (YRCDC) operating expenses for a $5 million, six-year study. The cost-share agreement stipulates that the U.S. Army Corps of Engineers will pay for 75 percent of the study, with the remaining 25 percent coming from state and local funding and in-kind services. In addition to funding, CDB provides administrative and technical assistance to the 13 CDs that make up the YRCDC. In FY 2006, the YRCDC continued work on gathering information about the condition of the Yellowstone River. Preliminary and final reports of work under way can be found at www.dnrc.mt.gov/cardd/yellowstonerivercouncil/.

Missouri River Conservation District Council

CDB distributed $80,000 to the Missouri River Conservation District Council (MRCDC) which is made up of 16 CDs. Funding supports planning and educational efforts on the Missouri River.

Natural Resource Conservation Education Activities

This program provides grant funding and policy guidance for resource conservation education programs. In FY 2006, the CDB assisted conservation districts in sponsoring adult education, elementary and secondary school activities, and several annual events: the Envirothon at Lewistown, Montana Youth Resource Camp at Lubrecht State Forest (east of Missoula), and Natural Resources Youth Range Camp at Farmer's Union Arrowpeak Camp (40 miles east of Great Falls). Program goals are to promote discussion of resource issues and provide the knowledge and skills necessary to make decisions regarding the management, protection, and wise use of our natural resources.

Conservation Education Mini-Grant Program

Mini-grants up to $500 each are available to conservation districts working with schools on natural resource conservation education projects or for adult education. Funds have been used for a wide variety of projects, ranging from building outdoor classrooms to purchasing water quality and soil-testing equipment for use in outdoor curricula. Funds were also used for weed seminars and for a fire prevention workshop for adults. The 223 program provides funds for the mini-grant program. In FY 2006, the 19 mini-grants listed in Table 3 were funded for a total of $8,913.

Small Acreage Stewardship Education

CDB works cooperatively with conservation districts and other local groups to implement a small acreage stewardship curriculum. Major benefits of this program are:

- providing landowners with the tools to manage their property to meet their goals and address resource concerns; and
- giving local resource agencies an opportunity to contact and develop working relationships with small acreage owners.

CDB worked with a group of local weed coordinators from across the state to produce a hands-on guide to weed management for small acreage owners.

Table 3
FY 2006 Conservation Education Mini-Grants Awarded

Conservation District	Project	Amount
Broadwater	Broadwater High School - Townsend Tree Brochure	$ 500
Carbon County	4th Annual Conservation Day	500
Carbon County	Adult Education - Grazing Workshop	325
Cascade County	Ulm School - Biodiversity Project	500
Dawson	Diesel/Better Soil Seminar	500
Fergus	Weed Seminar	500
Fergus	GPS	437
Judith Basin	Hobson School - Natural Resource Day	435
Lewis and Clark	Helena High School - Science Seminar	500
Lower Mussellshell	Roundup Central Elementary - Yellowstone Expedition	500
McCone	Organic Transition Workshop	500
McCone	Adult Education - Energy Workshop	500
Missoula	Lewis and Clark School - Recycle Program	500
Pondera County	Dupuyer Outdoor Classroom	500
Pondera County	Birch Creek Colony - Weather Station	500
Sheridan County	Plentywood School - Ag in the Classroom Project	496
Stillwater	Multiple Schools - 16th Annual Conservation Day	500
Teton	Outdoor Classroom - Creeks & Critters	332
Valley County	Multiple Schools - Outdoor Classroom	388
	Total	**$ 8,913**

Grant Programs

The bureau administers five grant programs. Conservation Education Mini-Grants, Watershed Planning and Assistance Grants, and Legal and Technical Assistance Grants were discussed earlier in this section.

Conservation District Project Grants

The Conservation District Project Grants Program was established in 1981 to provide funding for CDs' lawful duties and responsibilities. The program funds a variety of CD activities such as: stream bank protection, erosion control, new conservation technology demonstrations, soil and water conservation projects, youth and adult educational activities, and conservation equipment rental programs. In FY 2006, $337,513 was granted to CDs for various projects. All projects funded in FY 2006 are listed in Table 4, and the allocation of funds is shown in Figure 4.

The 2006 Montana Envirothon winning team from Thompson Falls High School. They represented Montana in 2006 at the national competition at the University of Manitoba, Canada. Photo by Ross Campbell

Table 4
FY 2006 Conservation District Project Grants Awarded

Conservation District	Project	Amount
Beaverhead	Weed Intern	$ 1,514
Beaverhead	Kalsta Springs Creek Restoration	10,000
Big Horn	Coalbed Methane Tour	1,000
Broadwater	Education/BioControl of Weeds	2,300
Broadwater	Phase 2 Front Street Stormwater	4,500
Broadwater	Biomass Boiler for School	15,000
Carbon	Soil Water Conservation Service Annual Conference	4,975
Carbon	Concrete Diversion Blocks	9,014
Cascade County	Mobile Environmental Science Lab	6,550
Daniels	Tree/Equipment Storage/Education Building	12,000
Deer Lodge	Capacity Funding Match	4,207
Eastern Sanders	Presentation Equipment	2,496
Eastern Sanders	Sanders County Water Festival	2,587
Gallatin	2007 Noxious Weed Calendar	7,875
Gallatin	Owning Eden DVD	4,000
Garfield County	Mosby/Musselshell Salt Cedar	7,200
Glacier County	Blackfeet Weed Program	15,000
Hill County	Car Body Removal - Milk River	8,500
Judith Basin	Conservation District Outreach & Training	15,000
Lewis and Clark	Upper Ten Mile Tree Planting	2,860
Liberty	Marias River Management & Education	10,000
Lincoln	Forestry Brochure	2,500
McCone	Prairie Elk Project	3,097
Meagher County	Smith River Hydro Study	25,000
Mile High	Noxious Weeds Project	12,000
North Powell	Conservation Project Planning	10,000
Park	Upper Yellowstone	5,215
Park	2006 Watershed Symposium	10,000
Petroleum	Land Ownership Map Update	5,000
Phillips	Upgrade Kit for GPS Unit	1,105
Pondera County	Water Management Software	7,000
Powder River	Water Measuring Plan	707
Prairie	Irrigation Water Management	8,000
Richland County	Dehuller for Ethanol Production	12,500
Roosevelt	Dredge Operator & Maintenance	10,000
Ruby Valley	Ruby Valley Planning Coordinator	5,000
Sheridan County	Water Monitoring Equipment	5,600
Sweet Grass	Gauging Project	6,000
Treasure County	Icopini Filter Strip Demo	1,211
Valley County	Greenhouse	15,000
Various	CD Electronic Equipment	11,087
Various	Education Mini-Grants	8,913
Wibaux	Traux Grass Drill	11,000
Yellowstone	Swords Park Education Shelter	15,000
	Total	**$ 337,513**

Administrative Grants

In FY 2006, the CDB distributed $275,000 from the General Fund and the Coal Tax Fund as grants to 34 CDs where county mill levies were inadequate to support district operations. These funds are for administrative purposes only and are mostly granted to conservation districts in some of the smallest communities in Montana. Funding is also used for other general operating expenses. This fiscal year, CDs were able to match funds from this program with federal Farm Bill money to increase their ability to assist with implementing Farm Bill projects. Information on the Coal Severance Tax and Resource Indemnity Tax (RIT) is presented in Appendix A.

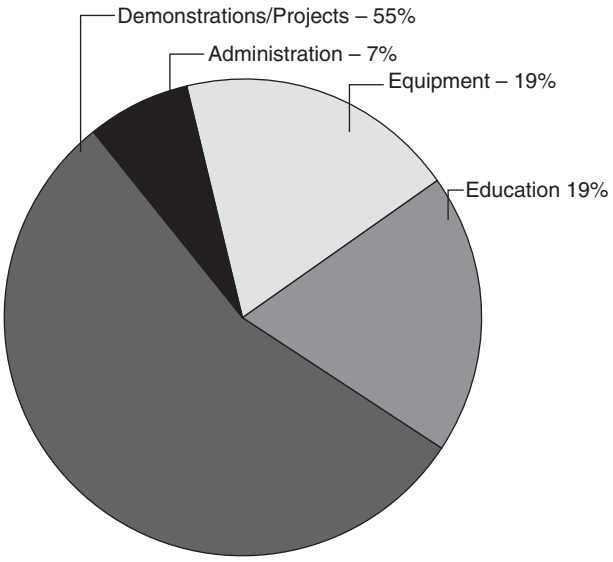
Resource Conservation and Development Areas (RC&D)

In a cooperative effort with NRCS, the bureau has taken a lead role in assisting in activities of the NRCS partnership coordinator and the Central Montana RC&D Area. The partnership coordinator is helping to develop key issues and providing assistance to RC&Ds in Montana (see Figure 5).

The Central Montana RC&D was involved in the following activities:

- sponsored monthly First Time Homebuyer classes attended by more than 100 potential homebuyers in central Montana for the Montana Housing Network, U.S. Department of Agriculture (USDA) Rural Development Program, and the Lewistown Home Program, and did one-on-one counseling;
- continued assistance for development of coal and energy resources in the region;
- continued implementation of Western States Wildland Urban Interface Project;
- provided grant-writing and administrative services to numerous agencies and jurisdictions for various emergency services, irrigation, public infrastructure, tourism, and recreation projects;
- provided staff assistance for the Central Montana Regional Water Authority for water rights preparation, grant administration, meeting(s) coordination, public information, funding requests, and records keeping;
- provided articles and advice for the quarterly newsletter sent to RC&D sponsors;
- served on the Musselshell County Tax Increment Financing District (TIFD) planning committee;

Figure 4
FY 2006 Allocation of Grant Funds for Conservation District Projects



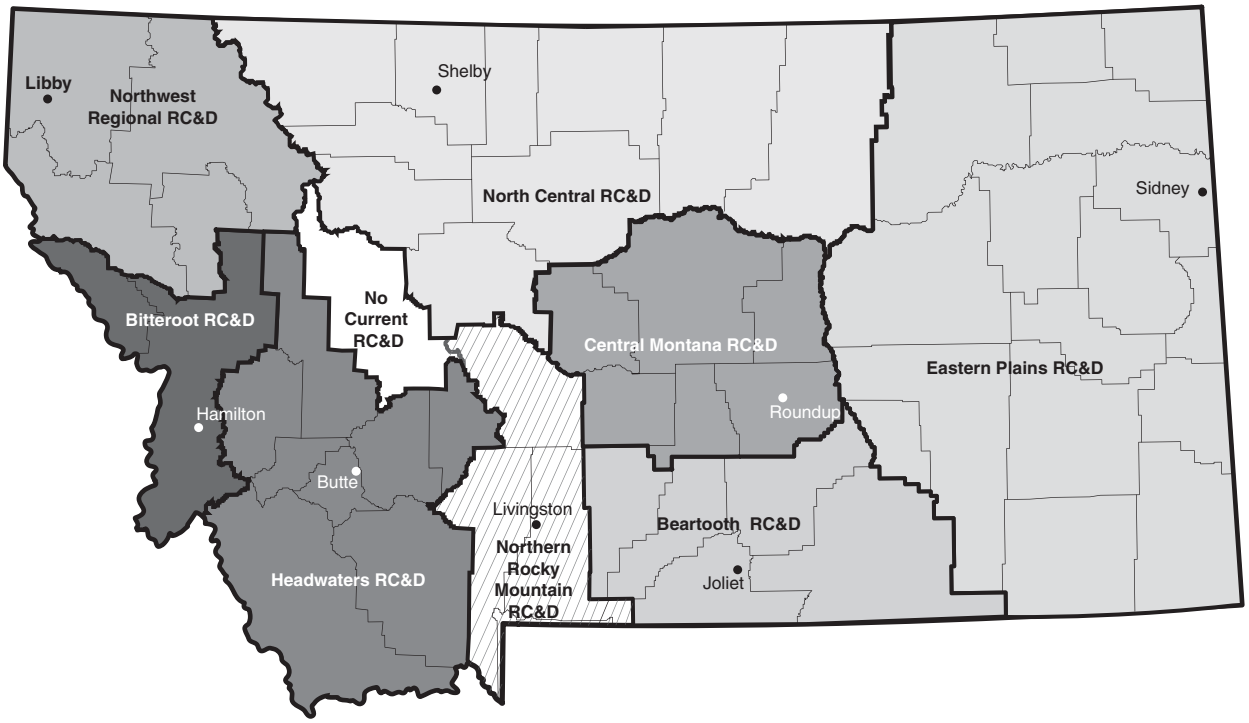
- assisted Canadian Home Manufacturing Co. with securities registration and efforts to begin a U.S. operation;
- began area plan update process for RC&D area; and
- coordinated multiple applications to the federal Clean Renewable Energy Bond Program (CREB) for area cities and counties for wind energy projects.

Montana Salinity Control Association

The Montana Salinity Control Association (MSCA) is a satellite program for conservation districts established to reclaim and prevent saline seeps and other agricultural-related water quality problems, on an individual farm and/or watershed basis. MSCA originated in 1979 in nine counties but has expanded to serve 34 counties. MSCA is partially funded from Resource Indemnity Trust (RIT) taxes (see Appendix A) administered by CARDD/DNRC and received $250,000 in FY 2006. Additional funding is generated through grants, landowner cost-share, and/or other user fees for projects. Outside funding has been received since 1983, following a four-year pilot program funded solely through DNRC grant programs.

Conservative estimates indicate that over 300,000 crop land acres in Montana were affected by salinity problems. MSCA has developed individual

Figure 5
Resource Conservation and Development Areas in Montana



reclamation plans for 1,080 sites, with 134,281 planned acres, to address 17,525 salinized acres that were no longer productive. Fourteen salinity-based watershed projects ranging from 4,000 acres to over 625,000 acres are in progress or have been completed. MSCA has provided significant technical assistance and will continue to do so in these watershed projects. With the preliminary MSCA groundwater investigations completed on 14 watersheds, additional projects can be incorporated to complement overall benefits. Each watershed project has a local advisory group that contributes funds and/or provides coordination between landowners and technical agencies.

Several irrigation-based salinity projects have been initiated by MSCA working with producers, NRCS, Bureau of Indian Affairs (BIA), and irrigation districts/companies. MSCA has developed a new brochure specific to the Bullhead Water Quality Project, one of the irrigation-based projects. MSCA is involved in the organization of individual saline and watershed projects through local conservation districts, with the CDB/DNRC staff often assisting. MSCA works with watershed groups and conservation districts to develop reasonable and science-based Total Maximum Daily Load (TMDL) plans on specific watersheds.

MSCA coordinates with state and federal agencies to utilize and adapt their technical assistance and funding programs to address nonpoint source pollution and other resource concerns. Federal programs within USDA and U.S. Environmental Protection Agency (EPA) are accessed to assist individual producers in implementing the remediation methods MSCA recommends to achieve saline reclamation.

In addition, MSCA has a strong relationship with Canadian provincial salinity specialists to share information through the Prairie Salinity Network. Similar cooperation has been established over the years through Australian research and landowner groups. MSCA participated in the first International Salinity Forum in April 2005, presenting a paper on successful dry land saline reclamation in Montana. A video documenting the MSCA field procedures and reclamation techniques for dry land salinity has been developed for NRCS training purposes.

Financial Development Bureau

The Financial Development Bureau is responsible for preparing and managing the cash flow of the division's programs. The bureau also issues loans to borrowers and manages the financial administration of Montana's Water Pollution Control State Revolving

Fund (WPCSRF) and Drinking Water State Revolving Fund (DWSRF) Loan programs. Functions of the bureau include:

- issuing general obligation bonds;
- issuing coal tax bonds;
- monitoring the operating budget of the division;
- preparing cash flows for;
  - Water Pollution Control Program;
  - Drinking Water Program;
  - Reclamation and Development Grants Program;
  - Renewable Resource Grant and Loan Program;
- monitoring financial statements of public borrowers;
- monitoring arbitrage calculations for all DNRC bonds; and
- administering loans made to public entities;

With passage of the WPCSRF and DWSRF legislation, the volume of work dictated the formation of the Financial Development Bureau. The loan portfolios alone have grown to over $342.4 million (see Table 5).

Table 5
Loan Portfolios

Type of Loan	Amount
Coal Tax Loans	$ 42,566,331
Water Pollution Control Loans	200,499,747
Drinking Water Loans	99,387,392
Total	$ 342,453,470

The disbursements to grantees can be as much as $5 million per year. Approximately 750 to 1,000 contracts are outstanding at any one time. Financial expenditures on each contract are tracked separately. Cash flows are produced monthly. For the revolving fund programs, investments must be made for repayment funds in the program.

Bond sales are planned to meet the construction schedules of the borrowers. On the average, $5 million to $10 million in bonds is issued each year. In FY 2006, more than $3 million in bonds was issued. Loan disbursements were over $41 million in FY 2006.

Water Pollution Control State Revolving Fund Loans

The WPCSRF was created by the 1989 Legislature. It is designed to combine federal grant money with state matching money to create a low-interest loan program that funds community wastewater treatment projects. DNRC and the DEQ co-administer the WPCSRF program. EPA makes a grant of federal funds to the state. The state must match 20 percent of that grant. The state's share is derived from the sale of state general obligation bonds. From 1991 to 2003, the interest rate was 4 percent for up to 20 years. In FY 2004, the interest rate dropped to 3.75 percent; this rate continued in FY 2006.

Since the program started, the State of Montana has issued $23 million in general obligation bonds, and EPA has contributed $119.1 million in grants. These state bonds and federal grants, together with $58.3 million in "recycled" (repaid) loan funds, account for the $200.4 million program level. Twelve loans totaling $13.8 million were closed in the 2006 construction season. See Table 6 for a listing of current loans. Program staff expect to make loans of $15 million in FY 2007.

The Bigfork Water & Sewer District borrowed $2.5 million to rehabilitate its wastewater treatment facility. The 20-year loan has an interest rate of 3.75 percent. Many communities are facing the same problem; their treatment plants are 30 years old and need rehabilitation.

Also in FY 2006, the town of Superior borrowed $500,000 to make wastewater system improvements. This community demonstrated hardship and received a 2.75 percent interest rate. The loan term is 20 years. This loan was combined with grants from other programs to complete the project.

The 1997 Legislature authorized the WPCSRF to start financing landfills for small communities. The first landfill loan was made to the Northern Montana Refuse District in FY 2003. The Lewis and Clark County landfill loan was completed in FY 2005, and more are expected to close in FY 2007.

Drinking Water State Revolving Fund Loans

The DWSRF provides funds for training, technical assistance, and the issuance of low-interest loans to local governmental entities to finance drinking water facilities and implemention of the Safe Drinking Water Act. State enabling legislation was passed in 1995 and

amended in 1997, after the U.S. Congress passed federal enabling legislation in August 1996. DNRC and DEQ co-administer the Drinking Water Program. The two agencies first applied for federal funds in January 1998.

The state has issued $14.8 million in general obligation bonds, EPA has obligated $72 million, and $12.5 million in "recycled" (repaid) loans have been used to fund loans for a program level of $99.3 million. Twenty-seven loans totaling over $35.1 million were closed in the 2006 construction season. See Table 7 for a listing of current loans. Program staff expect to make loans of $15 million in FY 2007.

Table 6
Water Pollution Control State Revolving Fund Loans

Completed Loans	Loan Amount	Completed Loans	Loan Amount	Completed Loans	Loan Amount
Augusta	$ 502,981	**Flathead County**		*Missoula (continued)*	
Belgrade	1,058,000	Bigfork	$ 424,000	Reserve Street Interceptor	$ 459,162
Belgrade II	1,940,000	Evergreen I	3,600,000	Reserve Street/Pineview SID	718,000
Belgrade III	1,512,000	Evergreen II	700,000	Reserve Street SID 526	2,671,000
Big Sky I	5,513,000	Forsyth	1,302,534	SID 520	2,634,000
Big Sky II	417,000	Fort Benton	1,177,000	Storm Sewer	4,577,000
Big Sky III-A	7,000,000	Froid	60,846	Wapikiya/Bellevue Clarifier I	2,465,000
Big Sky III-B	6,500,000	Gallatin Co./Hebgen Lake	4,136,000	Wapikiya/Bellevue Clarifier II	1,177,000
Big Timber	384,719	Geraldine	113,000	Wapikiya/Bellevue SID 503	324,000
Bigfork	1,000,000	Glasgow I	402,000	Wastewater Phase-I	5,000,000
Bigfork	2,486,000	Glasgow II	1,048,000	Wastewater Phase-II	3,800,000
Bigfork County WSD	162,843	Glasgow III	778,470	Wastewater Phase-III	3,688,000
Billings	4,515,000	Glasgow GAN	251,740	**Missoula County**	
Billings SID	516,000	Glendive I	236,000	Country Crest	283,000
Bozeman	400,000	Glendive II	376,000	El Mar	169,000
Butte-Silver Bow	5,307,390	Great Falls	11,295,267	Golden West	14,000
Cascade I	201,609	Great Falls Storm Sewer	4,390,491	Linda Vista I	241,000
Cascade II	1,217,987	Hardin	2,026,390	Linda Vista II	1,943,000
Choteau Refinance	109,212	Harlowton	777,073	Lolo	649,936
Choteau I	500,000	Harrison W & S	319,472	Mullan Road RSID 8474	4,498,121
Choteau II	352,595	Havre	2,160,770	Mullan Trail	31,000
Colstrip	300,000	Helena	9,320,000	Nashua	193,769
Colstrip	503,000	Hinsdale W & S	125,000	Northern Montana Refuse District	1,035,315
Columbia Falls	2,509,405	Hot Springs	158,442	Park City County WSD	692,000
Columbus	1,539,627	Kalispell I	3,913,000	Park County I	378,000
Conrad	710,510	Kalispell II	1,475,860	Park County II	83,000
Conrad Refinance	233,000	Kessler School	185,283	Red Lodge	390,000
Corvallis GAN	235,155	Kevin	47,000	Red Lodge BAN	3,876,731
Corvallis Sewer District	351,000	Kevin II	45,000	Richey	60,000
Cut Bank I	531,000	Laurel	866,000	River Rock WSD	3,100,000
Cut Bank II	800,000	Lavina	121,000	Ronan	619,905
Darby	111,000	Lewis and Clark County	3,043,858	Scobey I	500,000
Denton I	55,000	Lewistown I	500,000	Scobey II	832,000
Denton III	139,130	Lewistown II	5,400,000	Shelby	481,000
Dillon I	1,992,914	Lincoln	308,914	Shelby Refinance	453,000
DNRC-RDB I	1,500,000	Livingston I	155,000	Superior	82,000
DNRC-RDB II	1,750,000	Livingston SID	161,000	Superior II	238,000
DNRC-RDB III	2,000,000	Livingston TIF	338,000	Sweet Grass WSD I	80,000
DNRC-RDB IV	2,225,000	Manhattan I	636,000	Sweet Grass WSD II	150,000
DNRC-RDB V	2,100,000	Manhattan II	220,000	Townsend	1,071,000
DNRC-RDB VI	2,500,000	**Missoula**		Troy	1,817,281
DNRC-RDB VII	1,300,000	39th Street	1,306,984	Valier I	200,000
DNRC-RDB VIII	1,600,000	Broadway/Birch	1,997,000	Valier II	19,008
DNRC-RDB IX	1,725,000	California Street	502,000	Vaughn-Cascade WSD	248,128
Drummond	52,920	Gilbert Street SID	244,000	Victor W & S	300,000
East Helena I	91,000	Lincolnwood SID	254,000	Virginia City	366,000
East Helena II-A	1,983,000	Mullan Road	1,820,000	Virginia City	500,000
East Helena II-B	1,494,000	NW Broadway	943,000	Whitefish	200,000
Ennis I (continued)	500,000	Pineview SID 525	658,000	Whitewater WSD	120,000
Ennis II	886,000	Rattlesnake	304,000	Wolf Point	453,000
		Reserve Street	2,221,000	Worden-Ballantine WSD	260,000
				Total of all wastewater revolving fund loans	$ 200,449,747

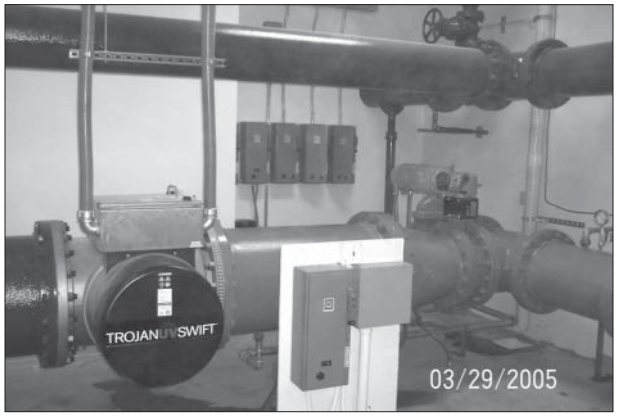
Of the 27 loans closed, one was to the city of Billings. The project loan was for $17.3 million at 3.75 percent interest. These funds were used for the rehabilitation of the city's drinking water plant.

The Power-Teton Water District borrowed $375,000 to work on its water system. Because the district met the program hardship criteria, the loan interest rate was 2.75 percent for 20 years.

These projects continue to improve the communities that participate in the loan programs. The loan interest rate also helps to make the projects affordable. In the past, no loans were made over the 4 percent interest

Table 7
Drinking Water State Revolving Fund Loans

Completed Loans	Loan Amount	Completed Loans	Loan Amount
Big Sky I	$ 534,000	Laurel I	$ 5,250,000
Big Sky II	1,966,000	Laurel II	2,541,000
Billings SID	818,000	Lewistown	3,549,000
Billings	17,300,000	Livingston I	155,000
Boulder	1,294,000	Livingston SID	326,000
Bozeman	94,000	Livingston TIF	694,000
Broadview	203,000	Livingston Revenue	700,000
Brockton	44,998	Livingston Revenue	200,000
Cascade	129,998	Lockwood WSD	1,700,000
Charlo WSD	85,000	Lockwood WSD I	500,000
Choteau	332,000	Lockwood WSD II	500,000
Colstrip I	563,000	Miles City	1,050,000
Colstrip II	829,000	Missoula County Fair	206,194
Columbia Falls I	907,000	Missoula/Sunset West	291,000
Columbia Falls II	502,000	Neihart	107,617
Conrad I	650,000	Philipsburg	238,322
Conrad II	1,543,172	Phillips Co. Green Meadows WSD	65,000
Cut Bank I	283,000	Phillips Co. Green Meadows WSD (GAN)	100,000
Cut Bank II	576,000	Plains	265,000
Dry Prairie Rural Water Authority	313,000	Plentywood	577,000
East Helena I	228,000	Plentywood I	500,000
East Helena II	3,234,000	Power-Teton WSD	400,000
Elk Meadows Ranchettes	200,000	Power-Teton WSD	375,000
Ennis I	59,701	River Rock WSD	2,100,000
Ennis II	500,000	Seeley Lake	1,340,000
Eureka	619,000	Shelby I	866,000
Fort Peck WSD	1,520,000	Shelby II	677,000
Gardiner-Park County WSD - A	161,504	Shelby III	700,000
Gardiner Park County WSD - B	330,000	Shelby	709,000
Gardiner Park County WSD - C	267,000	Sheridan	265,200
Gardiner-Park County	500,000	Sheridan BAN	95,000
Geraldine	129,000	Superior I	500,000
Glendive	1,565,000	Superior II	1,229,105
Great Falls	3,000,000	Thompson Falls	500,000
Hamilton I	220,000	Thompson Falls	897,596
Hamilton II - A	500,000	Three Forks BAN	22,570
Hamilton II - B	318,000	Three Forks	336,000
Hamilton II - C	380,000	Three Forks	268,000
Hamilton	170,000	Twin Bridges	286,515
Hardin	453,900	Upper Lower River Rd. WSD	500,000
Havre I	600,000	Upper Lower River Rd. WSD	195,000
Havre II	8,401,000	Upper Lower River Rd. WSD	243,000
Helena	1,250,000	Virginia City	66,000
Helena	3,100,000	Whitefish I	400,000
Highwood WSD	75,000	Whitefish II	5,839,000
Kalispell	761,000	Whitefish	905,000
LaCasa Grande WSD I	150,000	Wolf Point	730,000
LaCasa Grande WSD II	500,000	Worden-Ballantine WSD I	500,000
Lakeside	400,000	Worden-Ballantine WSD II	368,000
		Total of all Drinking Water Loans	**$ 99,387,392**



City of Billings rehabilitation of drinking water plant. Photo courtesy of Marc Golz, DEQ

rate. As with the WPCSRF Program, interest rates before FY 2003 were 4 percent; in FY 2004, the interest rate decreased to 3.75 percent.

Resource Development Bureau

The Resource Development Bureau (RDB) administers several grant and loan programs and provides assistance to conservation districts for the administration of water reservations and to landowners to develop new irrigation. The programs include:

- Reclamation and Development Grants Program;
- Renewable Resource Grant and Loan Program;
  - – Public Grants
  - – Project Planning Grants
  - – Emergency Grants
  - – Private Grants
  - – Private Loans
- Public Loans;
- Conservation District Water Reservations;
- Irrigation Development Program; and
- Regional Water Coordination.

FY 2006 was a successful year for these programs. More than $6.1 million in grant and loan funds was disbursed for projects throughout the state, and 729 contracts were actively administered.

Reclamation and Development Grants Program

The Reclamation and Development Grants Program (RDGP) is designed to fund projects that "indemnify the people of the state for the effects of mineral development on public resources and that meet other crucial state needs serving the public interest and the total environment of the citizens of Montana" (MCA 90-2-1102). The program was established in 1987. Any department, agency, board, commission, or other division of state government or any city, town, county, or other political subdivision or Tribal government within the state may apply for an RDGP grant. Grants of up to $300,000 are available per application. Funding for this program comes from interest income from the RIT Trust Fund and mineral taxes. In FY 2006, the RDB administered 33 reclamation and development grants totaling nearly $8 million.

The 2005 Legislature authorized 17 projects for funding, as shown in Table 8. Eleven of these projects were contracted in FY 2006, and CARDD anticipates that the six remaining projects will be contracted during summer 2006 (see Figure 6). In May 2006, RDGP received 18 grant applications requesting $4.8 million. CARDD will continue evaluating those applications and prepare recommendations for the 2007 Legislature.

Brewery Flats photo before and after cleanup. Photos courtesy of Historical Society and Ted Hahn, NRCS

The cleanup of Brewery Flats on Big Spring Creek near Lewistown has been completed. The area was formerly an industrial site and included a

Table 8
Reclamation and Development Grants Approved by the 2005 Legislature
(in order of their ranking)

Project Sponsor	Project Name	Approved Funding
Montana Board of Oil and Gas Conservation	2005 Eastern District Orphaned Well Plug & Abandonment & Site Restoration	$ 300,000
Montana Board of Oil and Gas Conservation	2005 Northern District Orphaned Well Plug & Abandonment & Site Restoration	300,000
Montana Department of Environmental Quality	Bluebird Mine Reclamation	300,000
Montana Department of Environmental Quality	Frohner Mine Reclamation	300,000
Montana Department of Environmental Quality	Buckeye Mine & Millsite Reclamation	300,000
Lewistown, City of	Reclamation of Brewery Flats on Big Spring Creek	300,000
Montana DNRC	St. Mary Studies and Design	900,000
Butte-Silver Bow Local Government	Belmont Shaft Failure & Subsidence Mitigation	300,000
Pondera County	Oil & Gas Well Plug & Abandon	100,000
Custer County Conservation District	Yellowstone River Resource Conservation Project	299,965
Teton County	Oil & Gas Well Plug & Abandon	50,000
Toole County	2005 Plugging & Abandonment Aid to Small Independent Oil Operators	150,000
Montana Department of Environmental Quality	Zortman Mine - Completion of Reclamation Alternative Z6	300,000
Butte-Silver Bow Local Government	Excelsior Reclamation	129,800
Powell County	Wetland Reclamation and Redevelopment	240,850
Montana Department of Environmental Quality	MTS Tire Recyclers Cleanup	300,000
Montana Department of Environmental Quality	Former Harlem Equity Co-op Bulk Plant	285,572
	TOTAL	**$ 4,856,187**

railroad switching yard, refinery, and garbage dump. Reclamation consisted of removing contaminated soil and revegetating the site. Spearheaded by the citizens of Lewistown, the area will now be used as a suburban park and recreation site. A multi-year effort involving local, state, and federal agencies, it was completed at a total cost of under $1 million in grants and donations.

Renewable Resource Grant and Loan Program

The Montana Legislature established what is now called the Renewable Resource Grant and Loan (RRGL) Program in 1993 by combining the Water Development Program and the Renewable Resource Development Program. The RRGL Program was established to promote development of renewable natural resources. Funding from RIT interest and mineral tax es is available to research, plan, design, construct, or rehabilitate projects that conserve, develop, manage, and/or preserve Montana's renewable resources. RRGL funds a variety of natural resource projects including groundwater studies, irrigation rehabilitation, water and soil conservation, municipal drinking water improvements, public wastewater, and forest enhancement.

Over $4 million is normally available over the biennium for grants to public entities for renewable resource projects. The 59th Legislature appropriated an additional $600,000 for grants for the 2007 biennium, for a total of $4.6 million. An additional $300,000 is available for grants to assist public entities in the planning and design of projects eligible for funding under RRGL. The loan program is funded through issuance of general obligation and coal severance tax bonds. The majority of private loans are for irrigation or water user association projects.

Public Grants

Up to $100,000 is available per grant application. The total cost of a project usually includes funds from other sources, in addition to RRGL grants and loans. In FY 2006, the bureau administered 38 renewable resource grants and $491,434 was disbursed. Table 9 lists RRGL projects in the order in which they were approved and ranked by the 2005 Montana Legislature; the allocation of funds is shown in Figure 7.

An example of a renewable resource project funded by ARR grant is the *Assessment of the Interaction between Groundwater and the Gallatin River in the Four Corners Area.* The Four Corners area is on the Gallatin River at the intersection of U.S. 191 and Montana Highway 85

in Gallatin County. Montana State University is doing the assessment in response to considerable concern by local residents, conservation groups, and agricultural interests regarding the impact of development on Gallatin River flows and groundwater levels in the area. This concern has already led to a proposal for a controlled groundwater area near the Four Corners.

The primary goal of this assessment is to collect data on the connection between the river and the groundwater flow system. The project will monitor shallow water levels in wells adjacent to the river, and place piezometers in the river, and river and irrigation ditch stage so interpretations can be made regarding groundwater/surface water interactions. This data will provide information necessary to create and later validate and modify a numerical model. The project will provide data so that developers, hydrologic consultants, conservation groups, resource managers, county elected officials, and local residents can make informed decisions regarding the impact of groundwater withdrawal on the groundwater system and the relationship between that system and the Gallatin River near Four Corners.

In FY 2006, RRGL received 81 applications for renewable resource projects requesting $8 million. These projects are currently being reviewed and ranked and will be presented to the 2007 Legislature for its approval.

Project Planning Grants

Project planning grants provide up to $10,000 on a 50 percent cost-share to governmental entities for completion of preliminary engineering, design, and feasibility analysis. Applications must explain how the project would contribute to the conservation, management, development, or preservation of renewable resources

Figure 6
Allocation of Funds for Reclamation and Development Grants Projects Approved by the 2005 Legislature

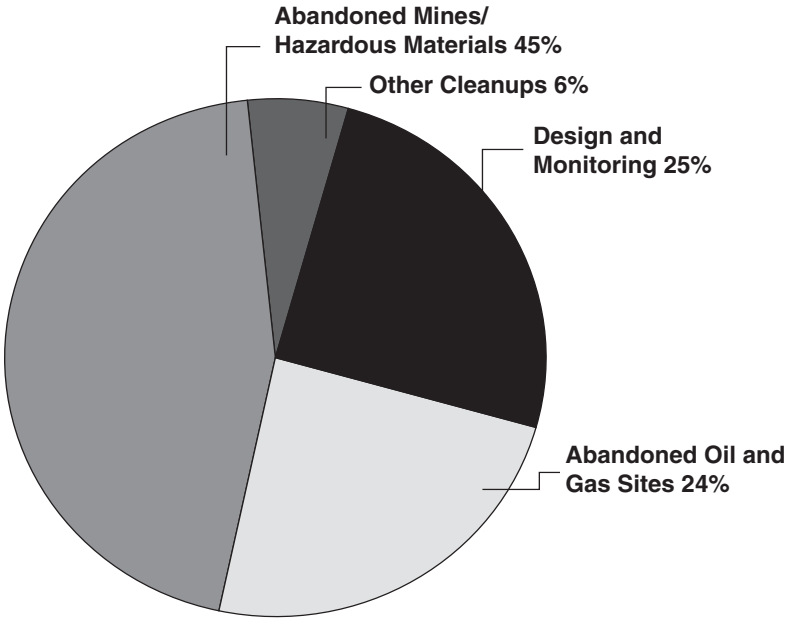


Figure 7
Allocation of Funds for Renewable Resource Grant and Loan Projects Approved by the 2005 Legislature

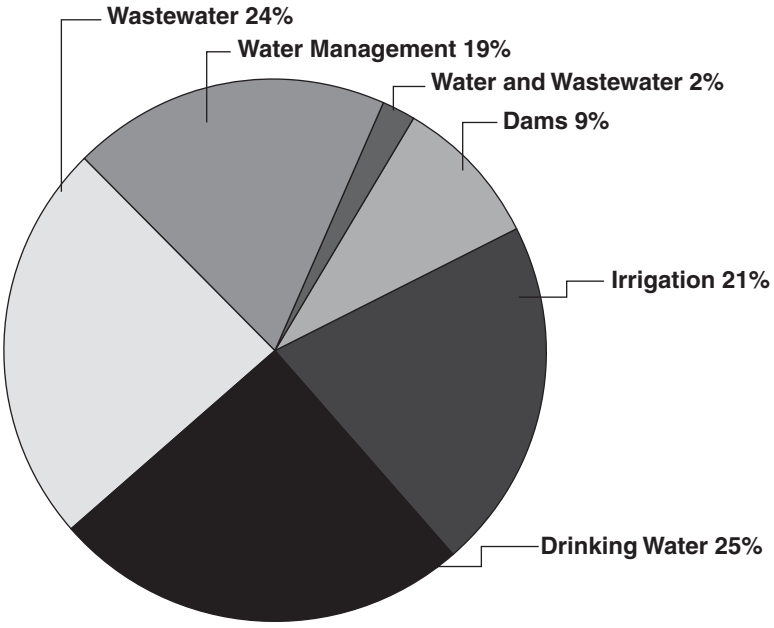


Table 9
Renewable Resource Grant and Loan Projects Approved by the 2005 Legislature
(in order of their ranking)

Project Sponsor	Project Name	Grant	Loan
Milk River Joint Board of Control	Halls Coulee Siphon Repair	$ 100,000	-
Spring Meadows Water District	Water System Improvements	100,000	-
Montana State University	Assessment of Groundwater & Surface Water in Four Corners Area	99,618	-
Beaverhead CD	Spring Creek Restoration Project - Phase 1	100,000	-
St. Ignatius, Town of	Wastewater System Improvements	100,000	-
Montana DNRC	Deadman's Basin Supply Canal Rehabilitation	100,000	$ 50,000
Jefferson Valley CD	Jefferson River Restoration	95,469	-
Carter-Chouteau Co. WSD	Carter Water System Improvements	100,000	-
Sheridan, Town of	Water System Improvements	100,000	
Lower Yellowstone Irrigation District	Lower Yellowstone Canal Control	100,000	-
Montana DNRC	Frenchman Dam Rehabilitation Study	100,000	-
Montana DNRC	Martinsdale North Dam Riprap Program	100,000	80,340
Seeley Lake Sewer District	Wastewater System Improvements	100,000	-
Upper/Lower River Road Co. WSD	Water and Wastewater System Improvements	100,000	-
Buffalo Rapids Irrigation District	Improving Irrigation Efficiency and Management through Canal Automation	88,955	-
Choteau, City of	Water System Improvements	100,000	-
Dodson, Town of	Wastewater Improvement Project	100,000	-
Gallatin Co.	Gallatin Co. Floodplain Delineation	100,000	-
Yellowstone Irrigation District	Flow Measurement Project	100,000	-
Gardiner-Park Co. WD	Water System Improvements - Phase 2	100,000	-
Liberty Co. CD	Chester Sprinkler Irrigation Project	100,000	-
Cascade, Town of	Water System Improvements	100,000	-
Ranch Co. WSD	Water System Improvements	100,000	-
Libby, City of	Cabinet Heights Wastewater System Improvements	100,000	-
Broadview, Town of	Developing a Viable Water Supply for Broadview	99,997	-
Montana DNRC	Martinsdale Outlet Canal Drop Structures	100,000	-
Roosevelt Co. CD	Fort Peck Irrigation Water Quality and Quantity Enhancement - Phase 1	99,995	-
Buffalo Rapids Irrigation District	Improving Irrigation Efficiency and Water Quality	100,000	-
Paradise Valley ID	Turnout Replacement	100,000	-
Manhattan, Town of	Wastewater Treatment System Improvements - Phase 2	100,000	-
Woods Bay-Homesites Co. WSD	Water System Improvements	100,000	
Custer Area-Yellowstone Co. WSD	Wastewater System Improvements	100,000	-
Fort Belknap Irrigation District	Sugar Factory Lateral - Phase 2	100,000	-
Laurel, City of	Wastewater System Improvements	100,000	-
Yellowstone CD	Canyon Creek Stream Restoration, Education, & Weed Control	100,000	-
Valier, Town of	Wastewater System Improvements	100,000	-
Fairfield, Town of	Wastewater System Improvements	100,000	-
Glasgow Irrigation District	Vandalia Dam Improvements - Phase 3: Struts and Walkways	100,000	-
Ennis, Town of	Wastewater System Improvements - Phase 2	100,000	-
Big Horn CD	Assessment of Alluvial Aquifers of Northern Big Horn Co.	100,000	-
Savage Irrigation District	Savage Irrigation Rehabilitation Plan	62,814	-
Butte-Silver Bow	Big Hole River Transmission Line Replacement	100,000	-
Whitefish, City of	Water System Improvements	100,000	-
Circle, Town of	Wastewater System Improvements	100,000	-
Black Eagle WSD	Water System Improvements	50,000	-
Lewis and Clark CD	Florence Canal Rehabilitation	100,000	-
Livingston, City of	Livingston Flood Damage Reduction Feasibility Study	100,000	-
Funding of projects below this point will depend on the availability of revenue.			
Missoula Co.	Grant Creek Restoration and Flood Mitigation	100,000	-
Liberty Co. CD	Marias Baseline Development	100,000	-
Hammond Irrigation District	Porcupine Creek Siphon Rehabilitation	38,200	-
Bearcreek, Town of	Water System Improvements	100,000	-
Ryegate, Town of	Wastewater System Improvements	100,000	-
Sun Prairie Village Co. WSD	Water System Improvements	100,000	-
Butte-Silver Bow	Water Master Plan	100,000	-
Montana DNRC	Increasing Montana Water Management Capacity	99,714	-
Milk River Joint Board of Control	Lake Sherburne Dam Outlet Works Rehabilitation	100,000	-
Bigfork Co. WSD	Wastewater System Improvements	100,000	-
Ruby Valley CD	Ruby Groundwater Management Plan - Phase 1	33,694	-
Cartersville Irrigation District	Sand Creek Siphon Rehabilitation	100,000	30,843
	Totals	**$ 5,668,456**	**$ 161,183**

in Montana. The grants are given on an "open-cycle" basis. In FY 2006, 33 planning grants were contracted for a total of $300,000. Eight planning grant contracts from previous years were also monitored.

Emergency Grants

The 2005 Legislature included $150,000 in its House Bill 6 appropriation for emergency grants for the 2007 biennium. DNRC may qualify a project as an emergency if it is one that, if delayed until legislative approval can be obtained, will cause substantial damage or legal liability to the entity seeking assistance. The emergency is typically associated with an unanticipated system failure and is not the result of normally expected use and deterioration. Emergencies do not include studies or planning efforts. Examples of emergencies include dam failures, failure of irrigation structures during irrigation season, and failed wastewater-pumping stations. All other reasonable sources of funding must be identified and exhausted before emergency funding is recommended.

In FY 2006, DNRC received inquiries for one qualifying emergency grant (under evaluation). The town of Richey is facing emergency repair to its water storage reservoir, which is leaking at the approximate rate of one cubic foot per second. Because water for the Richey water system is pumped from two 1,500-foot wells and treated – an expensive process – the problem is being mitigated immediately. The estimated cost to drain, underpin, and seal the concrete reservoir is $115,000.

Private Grants

Financial assistance is also available to any individual, association, partnership, or corporation (both for-profit and nonprofit). The legislature allocated $100,000 per biennium for private grants. By law, grant funding for a single project may not exceed 25 percent of the total estimated cost. Half of the funds are targeted to assist small, privately owned water systems. Owners of small systems have difficulty in meeting Safe Drinking Water Act regulations, but must meet the same requirements that municipal water systems face. DNRC has identified 105 private water systems for potential funding. The average size of a grant is $2,538; the grant must be matched on a 3-to-1 basis. In FY 2006, DNRC awarded five grants totaling $2,670.

Private Loans

Loans for private water development projects are available from DNRC. Loans to individual private entities may not exceed the lesser of $400,000 or 80 percent of the fair market value of the security given for the project. Private loans to individuals must be secured with real property. Loans up to $3 million are available for such organizations as water user associations and ditch companies. These loans are secured by the revenue produced by the system. Irrigation system improvements – for example, conversion from flood irrigation to sprinkler irrigation – are the most common type of project funded through private loans.

To finance loans, the law provided authority to issue general obligation renewable resource bonds up to a total outstanding balance of $30 million. The current outstanding balance on the loans is $15.8 million. In FY 2006, 376 loans were being administered.

In FY 2006, the private loan program sold $1 million in taxable general obligation bonds. The interest rate on these bonds is 3.75 percent, which is 2 to 3 percent below traditional market rates.Adding a 0.3 percent charge for a loan loss reserve, DNRC offers potential borrowers a very low interest rate of 4.05 percent for irrigation improvement projects. All loans must qualify as "nonpoint pollution control projects." Because the program primarily funds irrigation improvement projects, all new loan requests have qualified for these low-interest funds.

Public Loans

This program makes loans to governmental entities for renewable resource projects. The program was

Selling wheelines (foreground) after converting to center pivot (background) irrigation method. Photo by Larry Bloxsom

started in 1981 by the Montana Legislature, which granted $250 million in coal tax bonding authority. In FY 2006, 53 public loans with a balance of approximately $42.5 million were outstanding. The public loans are listed in Table 10. The Legislature has approved $4.7 million in loans for which funds have not yet been drawn.

The Renewable Resource Public Loan Program has been evolving into a new role over the last decade. Before 1990, the public loan program was one of the few low-cost sources of public loan funds available to municipalities. Many of the early loans in the public loan program were for municipal water and wastewater projects. However, since creation of the Water Pollution Control and Drinking Water State Revolving Fund (SRF) Loan programs, municipalities are borrowing funds at 3.75 percent from the SRF programs. This has freed capacity in the public loan program for other types of projects. In fact, the number of irrigation loans that the program has funded has steadily increased, which reflects the need for repair of aging ditches, diversions, and other irrigation infrastructure, as well as lack of any federal assistance for these projects. The public loan program also provides a safety net for municipal projects, such as solid waste projects, that may not qualify for SRF funding.

Conservation District Water Reservations

In 1978, the Board of Natural Resources and Conservation granted water reservations to 14 conservation districts (CDs) in the Yellowstone River Basin. Nine CDs were granted reservations in the Upper Missouri River Basin in 1992, and 11 CDs were given reservations in the Lower and Little Missouri River basins in 1994. Some CDs have reservations in more than one basin. The Resource Development Bureau provides legal, technical, and programmatic assistance to conservation districts in the administration of these water reservations.

CDs continue to make major progress toward developing their water reservations. Work is ongoing to obtain low-cost electric power for irrigation

Table 10
Public Loans

Applicant	Balance Due	Applicant	Balance Due
Antelope Co. WSD	$ 46,959	Forsyth, City of	$ 186,180
Beaverhead Co./Red Rock WSD	1,590,600	Fort Benton, City of	359,865
Bitterroot Irrigation District	515,038	Gardiner-Park Co. WD	86,432
Bozeman, City of	131,893	Glasgow, City of	277,813
Bozeman, City of	173,518	Harlem, City of	67,450
Broadwater Power Project	17,245,000	Huntley Irrigation District 1	839,004
Buffalo Rapids Irrigation District	779,138	Huntley Irrigation District 2	201,262
Cut Bank – N. Glacier WSD	28,090	Huntley Irrigation District 3	73,658
Daly Ditches Irrigation District	305,483	Huntley Irrigation District 4	212,839
Denton, Town of	24,810	Hysham, Town of	134,707
DNRC/State Water Projects Bureau	-	Lower Willow Creek Irrigation District	98,091
Bair Dam	818,244	Malta Irrigation District	1,956,697
Broadwater-Missouri Pipespan	287,579	Miles City, City of	478,657
Deadman's Basin (Barber)	303,938	Mill Creek WSD	506,102
Deadman's Basin-Canal	55,000	Park Co. RSID #7	14,010
East Fork Rock Creek Dam	550,000	Pondera Co. Canal & Reservoir	141,594
Nevada Creek Dam Rehab	434,905	Pondera Co. Canal & Reservoir	111,554
North Fork of the Smith River	412,188	Sage Creek Co. Water District	346,611
Petrolia Dam	246,663	Sanders Co. Water District at Noxon	46,317
Shields Canal Water Users	2,742	Sun Prairie SD	179,288
Dutton, Town of	63,556	Sun Prairie WSD	102,901
Dutton, Town of	11,370	Tin Cup WD	186,037
East Bench Irrigation District	361,846	Tongue River	9,271,795
East Helena, City of	57,629	West Yellowstone, City of	44,260
Ekalaka, Town of	8,952	West Yellowstone, City of	121,430
Fairview, City of	83,280	White Sulphur Springs, City of	36,241
Flathead Co.	1,850,288	Wibaux, Town of	96,827
		TOTAL:	**$ 42,566,331**

New spillway construction on Nevada Creek Dam in Powell County. Photo courtesy of Bob Fischer, DNRC

through the Pick-Sloan Program. The CDs continue to actively to inform the public of the availability of reserved water through newsletters, newspaper articles, county/agricultural fair booths, and direct mailings to potential water users.

Irrigation Development Program

The Irrigation Development Program was originally developed and originally funded by the 1999 Legislature. One of the key goals of this program is to develop new irrigation projects that grow high-value crops such as potatoes and sugar beets. Almost half of the time spent in this program involves assistance to existing projects.

In FY 2006, program staff worked with groups throughout Montana to pursue development of new projects and find ways to increase the value of existing irrigation. The DNRC irrigation development officer assisted and advised the Fort Peck Tribes on development of the North Sprole and Fort Kipp irrigation projects.

Loss of Bureau of Reclamation funding for applications of polyacrylamide canal sealant brought attention to the need to assess and document the benefits of this product. After meetings with several irrigation districts and companies, program staff initiated a study of canal sealant on the Pondera County Canal and Reservoir (PCCR) system. The Montana Salinity Control Association assisted with documentation and monitoring of leakage associated with the sealant applied to the PCCR.

Assistance has been given to the Fort Peck Water Users for professional services to prepare designs and budgets to develop water re-use plans. Funding has also been given to the Chester Irrigation Project to provide technical assistance for this proposed project. Work has begun to develop a four-state irrigation development summit in Billings for fall 2006. The Lower Musselshell Water Users Association conducted meetings to discuss possible study of downstream storage reservoirs. New storage has the potential to add thousands of acre-feet to the lower basin for irrigation.

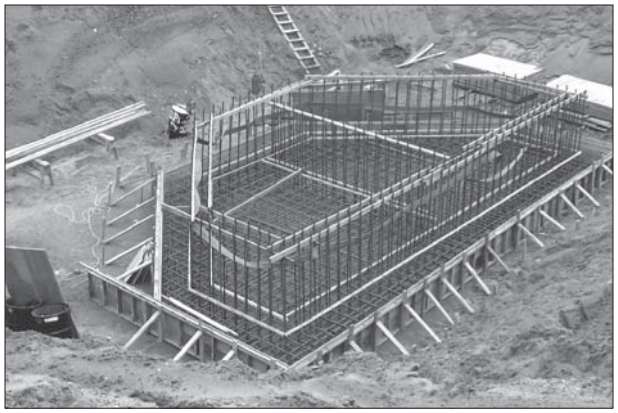
As part of the Irrigation Development Program, grants of up to $15,000 per irrigation project are available through CARDD. Both private and public applications are considered. Projects are eligible if they lead toward development of new irrigation or increase the value of agriculture for existing irrigated lands. Project examples include installing test wells for irrigation, conducting feasibility studies on irrigation system improvements or new irrigation projects, and providing information to the public, such as agriculture tours to educate producers on new technology. Grants and contracts awarded in FY 2006 totaled $150,000.

Regional Water Coordination

Fort Peck - Dry Prairie Rural Water System

This project was authorized by the U.S. Congress in October 2000 (Public Law 106-382). The U.S. Bureau of Reclamation (BOR) began releasing funds in September 2003. An innovative funding package combined federal, state, and local dollars, with significant assistance from CARDD. Dry Prairie Rural Water Authority (awarded contracts for construction of a 23-mile leg of water main from Culbertson to Medicine Lake. Water service began to the communities in October 2004. Total cost for this portion of the project was approximately $4.4 million, including a $313,000 SRF loan and an $826,000 grant from the Treasure State Endowment Program (TSEP) Regional Water Fund.

DPRWA's next phase of construction work, known as the "A" branch lines, completed the planning process. A pipeline construction firm was awarded the $5.5 million contract. Work on the branch lines into areas adjoining the Culbertson-Medicine Lake line has begun. The contract includes 190 miles of pipeline ranging in size from 1.5 to 8 inches in diameter. When completed in November 2006, the new lines will supply the town of Bainville and 188 rural households in Sheridan and Roosevelt counties with treated drinking water. Included in this portion of the project are two new 500,000-gallon finished water storage tanks north of Culbertson, for which a separate contract was awarded for just under $888,000.



Part of Fort Peck water intake structure. Photo courtesy Marc Golz, DEQ

Microfiltration System Pilot Testing at Tiber Reservoir – water intake pipe to testing facility equipment. Photo courtesy HKM Engineering, Inc.

The Tribes continued working on development of the water treatment plant (WTP) site. Given the uncertainty of the construction industry in the wake of Hurricanes Katrina and Rita, the lone bid came in substantially over the engineer's estimate, and was rejected. As of the end of FY 2006, the WTP construction plan had been split into several schedules, and two of those were out for bid.

Rocky Boy's - North Central Montana Regional Water System North

Authorization was signed into law in 2002 (Public Law 107-331, Title IX). The total project cost was set at approximately $230 million at the time of authorization. Completed activities include:

- a 2003 BOR engineering study for the entire project;
- completion of a water conservation plan;
- public hearings in summer 2003;
- pilot testing of water treatment plant technology at Lake Elwell in 2004;
- completion of the environmental assessment and issuing of a "Finding of No Significant Impact";
- drafting and completion of the final engineering report;
- tri-partite agreement by the Bureau of Indian Affairs, the Chippewa-Cree Tribe, and the North Central Montana Regional Water Authority for operation and maintenance of the core system;
- planning, design, and review of the raw water intake facility in Lake Elwell; and
- public hearings and other actions related to the commitment to membership in the authority by various communities and county water districts.

The project sponsors requested $17 million for federal FY 2006, and received $7 million. Most of those funds are to be used for project construction, including micro-tunneling into Lake Elwell from a site adjacent to Tiber Dam for the water intake structure and initial work on the design and site preparations for the water treatment plant. Ground-breaking ceremonies for the intake occured in August 2006 at Tiber Dam.

Central Montana Regional Water System

(formerly known as the Musselshell Valley Regional Municipal Water Project)

This system will reach from southwest of Hobson east and south through Judith Gap, then east to Melstone via Roundup, with branch mains south to Harlowton, Ryegate, and Lavina-Broadview. The communities of Moore, Garneill, Shawmut, and Musselshell may also be served. One preliminary estimate of costs was $34 million, based on the premise of untreated groundwater flowing largely by gravity in significant portions of the distribution system. The State Coal Board granted a total of $500,000 for exploratory drilling, water testing, and engineering studies. Test well drilling north of Utica on a tract of State School Trust Land was completed to a depth of 3,700 feet early in 2004, and an engineering firm was selected for related services. The well was tested for water quality and quantity in November 2005. The authority has applied to DNRC for a water right on the Utica well, and is prepareing requests to state and federal agencies for funds for construction of additional wells.

Dry-Redwater Regional Water Authority

This project was established due to interest from local officials and residents of Garfield, McCone, and portions of Dawson and Richland counties. A steering committee

was formed and it selected a qualified engineering firm. Grant requests for $90,000 were obtained for completion of all phases of the feasibility report, as well as a PER (Preliminary Engineering Report). Regional Water Authority status was conferred late in the summer of 2005, and a board was installed by the end of the year. Public meetings were conducted throughout the area early in calendar year 2006. As of the end of FY 2006, the final version of the feasibility study for the system was close to completion. Total estimated construction cost of the system, utilizing surface water treatment technology (Fort Peck Lake is the anticipated source), is currently at $79 million.

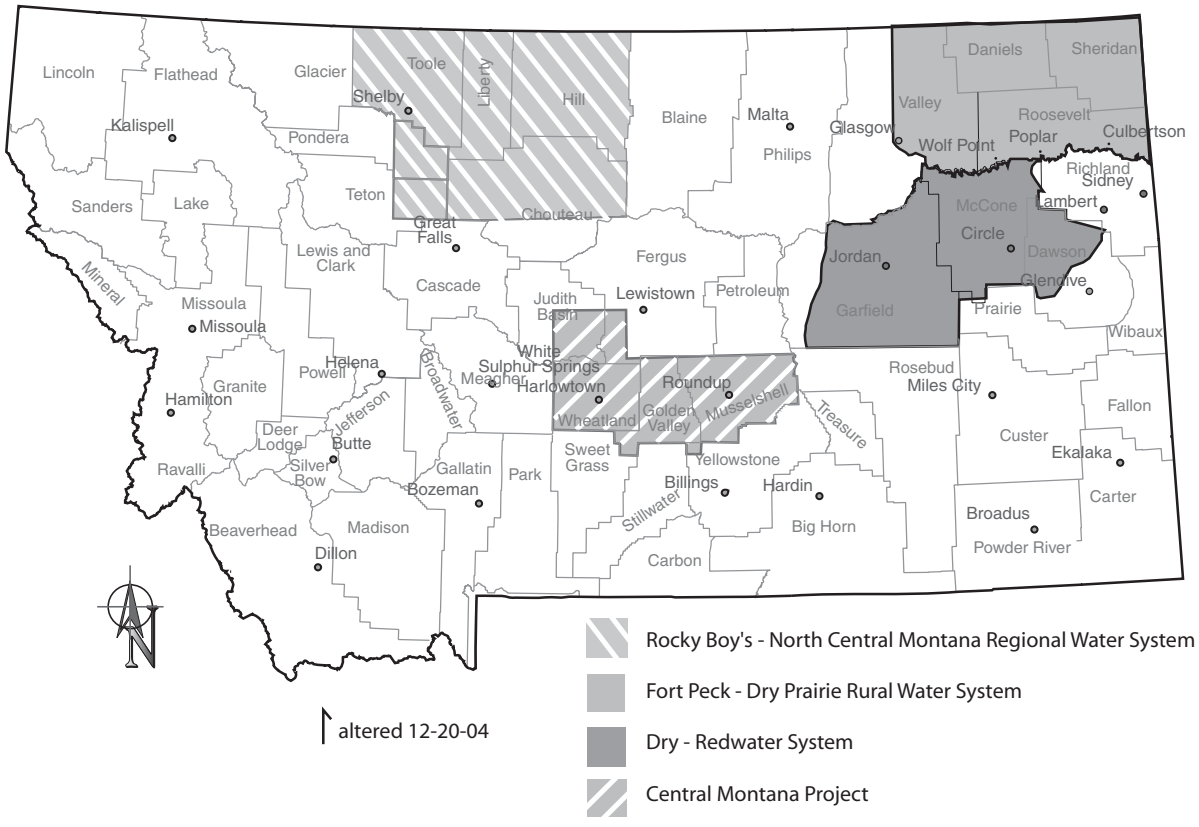
Initial Phase of the Utica Test Well Drilling Project. Photos courtesy Monty Sealey, DNRC.

St. Mary Rehabilitation Project

In 1903, construction of the Milk River Project was authorized as one of the first five projects built by the newly created Reclamation Service, now the U.S. Bureau of Reclamation (BOR), under the Reclamation Act of 1902. The St. Mary Diversion Facilities divert water from the St. Mary River Basin on the Blackfeet Reservation near Glacier National Park to the North Fork of the Milk River via a 90-year-old, 29-mile-long facility. Separate components include a storage reservoir on Swiftcurrent Creek, a diversion dam on the St. Mary River, canal headgates, two sets of inverted siphons, check and wasteway structures, five hydraulic drops, and approximately 29 miles of canal. The system is owned by the U.S. Government and operated and maintained by BOR.

After 88 years of service, many components of the diversion system have exceeded their design life and are in critical need of repair or replacement. Sudden failure of the

Figure 8 Regional Water System Service Areas



St. Mary Diversion Facilities will result in environmental damage on the Blackfeet Reservation, economically devastate communities and businesses along the Hi-Line, and likely have economic repercussions across the state. Based on an appraisal level study (updated and revised in 2005), BOR estimates construction costs for rehabilitating the St. Mary Diversion Facilities at between $120 million and $127 million depending on canal capacity (850 cfs to 1,000 cfs).

On average, the St. Mary Diversion Facilities divert approximately 160,000 acre-feet of water per year from the St. Mary River Basin to the Milk River Basin where it supports irrigated agriculture, communities and businesses, a national wildlife refuge, fish and wildlife, and recreational opportunities in north central Montana's Hi-Line region. The system provides water to irrigate over 110,000 acres through contracts with the BOR. These farms produce approximately 8.3 percent of all cattle/calves produced in the state, approximately 7.8 percent of all irrigated hay, and 8.2 percent of all irrigated alfalfa. In a normal irrigation season (May through September), approximately 70 percent of the Milk River flow near Havre originates from the St. Mary River Basin. In dry years, the imported water may constitute up to 90 percent of the Milk River flows past Havre. During the drought of 2001, 95 percent of available water in the Milk River originated in the St. Mary River Basin. Without this imported water, the Milk River would run dry an average of six of every 10 years.

Although the St. Mary Diversion Facilities were initially built to provide supplemental water for irrigated agriculture, the benefits extend far beyond this original intent. Water from the St. Mary River provides municipal water to approximately 14,000 people in the communities of Havre, Chinook, and Harlem. In addition, the Hill County Water District, a rural water system, has BOR-contracted water rights and therefore depends on water from the St. Mary Diversion.

Bowdoin National Wildlife Refuge, seven miles east of Malta, gets water from St. Mary. This refuge provides food and habitat for an estimated 100,000 waterfowl each spring and fall. Numerous endangered, threatened, and species proposed for listing, including the piping plover (threatened) and pallid sturgeon (endangered), benefit from supplemental Milk River flows. Fresno and Nelson reservoirs were created as storage components within the Milk River Project. Today these reservoirs support tourism and public recreation.

The DNRC continues to work with the Lt . Governor and St. Mary Rehabilitation Working Group to find a workable solution for rehabilitating the aging St. Mary Diversion Facilities. Through the combined efforts of the working group, DNRC, and Montana's congressional delegation, $9 million in federal funds was secured for the project in FY 2006. These funds will be used to construct a new county road bridge over the St. Mary River, address environmental concerns on the Blackfeet Reservation associated with operation of the diversion system, and continue with required engineering studies. State and local funds committed to the project include $900,000 in Resource Development Grants Program funds, $500,000 in Treasure State Endowment Program funds, over $372,000 of in-kind contributions from DNRC, and over $126,000 of in-kind contributions from working group members. The Montana Legislature also committed $10 million in bonding authority as a match to federal funds once construction is initiated.

The working group was also successful in its efforts to have the "St. Mary Diversion and Conveyance Works and Milk River Project Act of 2006" introduced in both the U.S. House and Senate. As introduced, the legislation authorizes the BOR to rehabilitate the St. Mary Diversion Facility and address associated issues of the Blackfeet and Fort Belknap Tribes and the Milk River Basin.

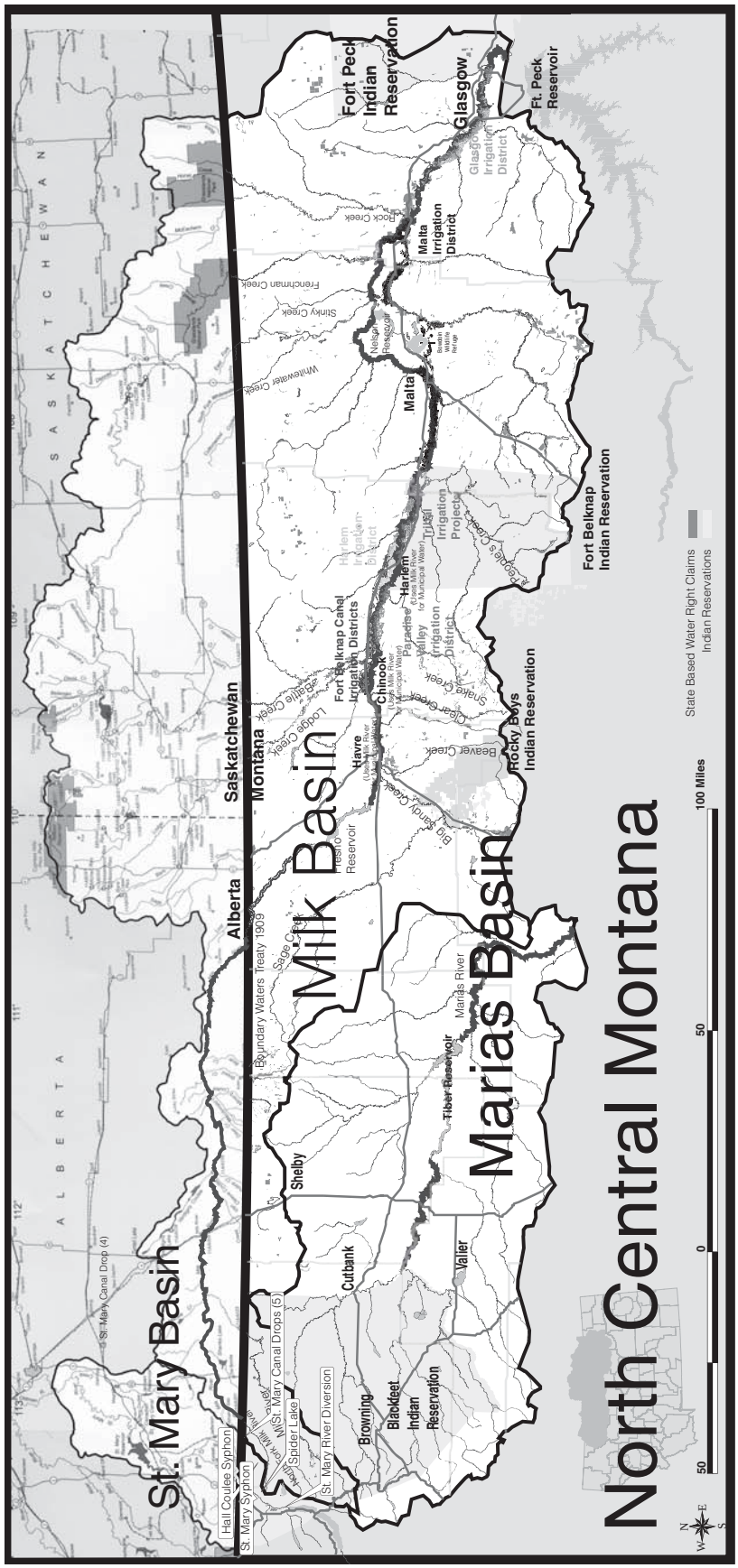
After a competitive selection process, DNRC contracted with an engineering firm to provide services to the state and working group. Work completed includes installation of six slope inclinometers to monitor movement of the side slopes at the St. Mary River Siphon crossing, initiation of a topographic survey along the canal route, and completion of a PER, which developed appraisal-level cost estimates for several rehabilitation alternatives. Upcoming work will include installation of four slope inclinometers to monitor the side slopes at the Halls Coulee Siphon crossing. DNRC has also entered into a memorandum of agreement with the Blackfeet Tribe to study the feasibility of generating hydropower at the concrete drop structures along the canal route.

The Milk River Basin is shown in Figure 9.

Websites featured in this section:

www.dnrc.mt.gov/cardd/
www.dnrc.mt.gov/cardd/yellowstonerivercouncil/

Figure 9
Milk River Basin – St. Mary Rehabilitation Project



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Spring in northwest Montana. Photo by DNRC staff